



**NOAA**  
**FISHERIES**



AFSC, Director  
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## Topic 0.5: Alaska Fisheries Science Center

Overview of AFSC's California Current Ecosystem Program

18-22 April 2016

# Terms of Reference Questions

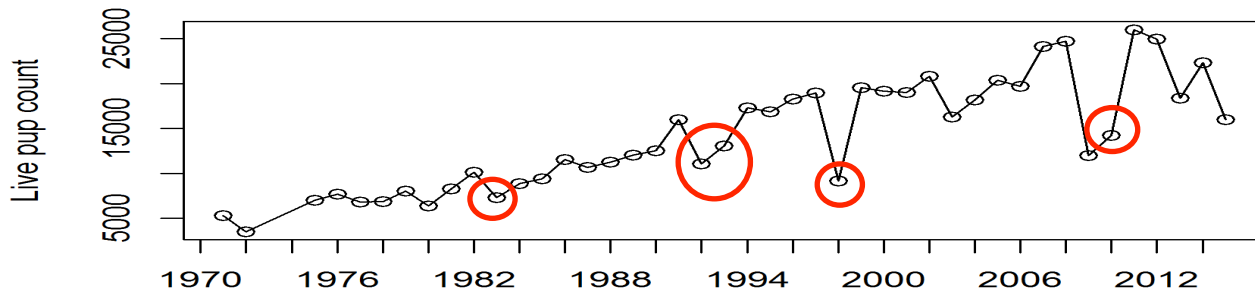
2. Address priority needs of the West Coast Regional Office, other NOAA managers, Fisheries Management Councils and Commissions plus other partners (BOEM and U.S. Navy)

# AFSC/MML CCEP Areas of Research



# Long-term Population Monitoring at San Miguel Island, California

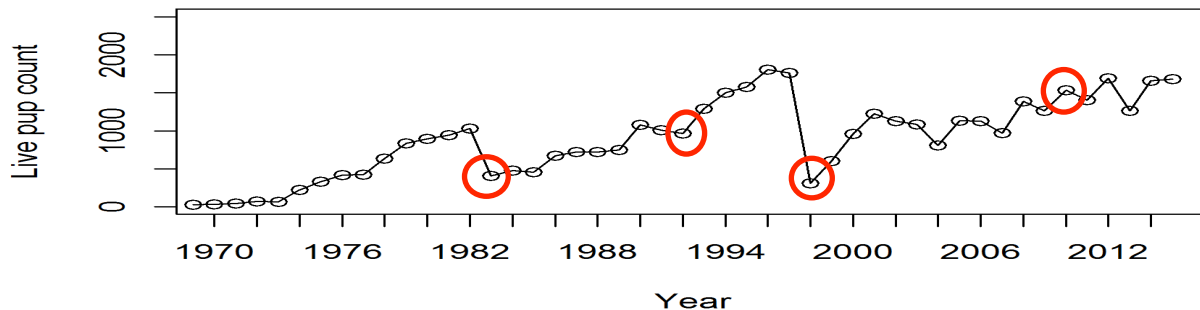
California sea lion Live Pup Count, 1971-2015



44 year data base

**El Niño events**

Northern fur seal Live Pup Count, 1969-2015



46 year data base

# Staff and Funding

- 7 FTE's; 1 Contractor
- Personnel costs: \$1,021,439
- Funding:

Source	FY16
West Coast Region	\$123 K
Alaska Region	\$ 65 K
Marine Mammal Health and Stranding Program	\$ 25 K
U.S. Navy	\$ 40 K
Strategic Environmental Research and Development Program	<u>\$104 K</u>
Total	\$ 357 K

# Guiding Mandates

- Marine Mammal Protection Act
- Endangered Species Act
- Magnuson-Stevens Act
- West Coast Region information needs

# West Coast Region Information Needs

- California sea lion adult male abundance and distribution in the NW in relation to predation of Endangered Salmonids and MMPA Section 120 authorization in Columbia River
- Maintain long term data sets on California sea lion and northern fur seal pup production, growth and vital rates to detect trends of populations and provide inputs for population modeling to evaluate status relative to OSP
- Vital rates of the southern-most Eastern Stock of Steller sea lions & Post delisting assessment
- Maintain and increase Gray whale Photo ID catalog of Pacific Coast Feeding Group in support of Region's management of Makah Whaling
- Conduct or support stock assessments for Inland WA harbor seals and harbor porpoise, west coast Steller sea lions, California sea lions and California Stock of Northern fur seals
- Support Status Review of Guadalupe fur seal
- Conduct and support California sea lion and Guadalupe fur seal Unusual Mortality Event investigations
- Support Region Stranding Response Program with predictions of likely annual stranding levels
- Advise on probable impacts of climate and oceanographic change on marine mammals in the California Current

# California Current Pinniped (U.S. Waters)

Species	Population
• Harbor seal	53,000
• California sea lion	296,800
• Steller sea lion	8,600
• Northern fur seal	13,500
• Northern elephant seal	179,000 *
• Guadalupe fur seal	~ 12,000 (Mexico)

\* At sea distribution primarily outside California Current



# AFSC/MML California Current Ecosystem Program

## Strengths

- Staff of focused field personnel
- Continuity of field effort to provide 40+ year long data series for CSL and NFS
- External collaborations have enhanced research efforts
- Internal collaborations within AFSC have allowed ecosystem assessments across 3 LME's
- Funding from regions and external sources for field operations

## Challenges

- Staff demography & retirements
- Maintaining support for a research program that functions primarily outside Alaska

## Solutions

- Replace some personnel upon retirements e.g., 1 replacement for 2 retirements
- Strengthen collaborations to augment field crews